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Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



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INVESTOR IN PEOPLE

The Patent Office  
Concept House  
Cardiff Road  
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NP10 8QQ

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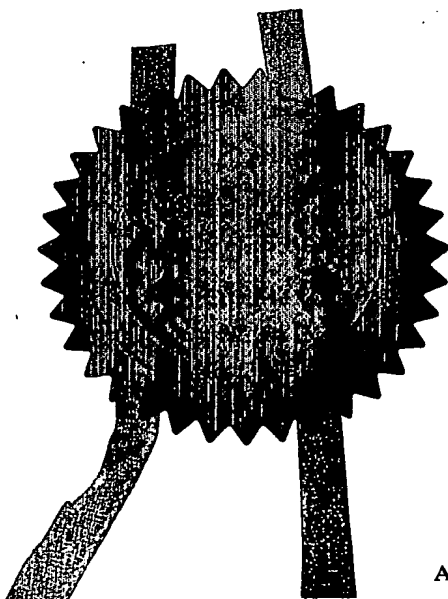
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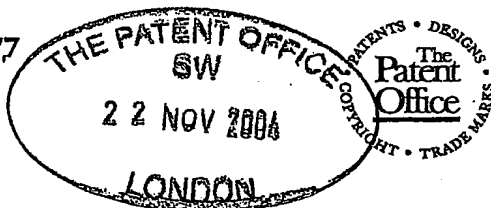
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The Patent Office

Cardiff Road  
Newport  
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NP10 8QQ

1. Your reference	Jg-3076		
2. Patent application number (The Patent Office will fill in this part)	0425642.6		22 NOV 2004
3. Full name, address and postcode of the or of each applicant (underline all surnames)	Mark Andrew Nicholson Godfreys Barn Sheepcoates Lane Little Totham Maldon Essex CM9 8NT United Kingdom 8794778001		
Patents ADP number (if you know it)			
If the applicant is a corporate body, give the country/state of its incorporation			
4. Title of the invention	A HEATING UNIT FOR HEATING A PATIO		
5. Name of your agent (if you have one)	Graham Jones & Company		
"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)	77 Beaconsfield Road Blackheath London SE3 7LG		
Patents ADP number (if you know it)	2097001 ✓		
6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number	Country	Priority application number (if you know it)	Date of filing (day / month / year)
7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application	Number of earlier application	Date of filing (day / month / year)	
8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if: a) any applicant named in part 3 is not an inventor, or b) there is an inventor who is not named as an applicant, or c) any named applicant is a corporate body. See note (d))	NO		

**Patents Form 1/77**

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description

3 —

Claim(s)

Abstract

Drawing(s)

2 + 2 *SW*

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (*Patents Form 7/77*)

Request for preliminary examination and search (*Patents Form 9/77*)

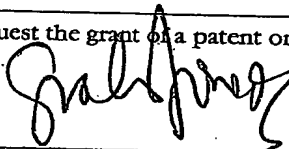
Request for substantive examination (*Patents Form 10/77*)

Any other documents  
(*please specify*)

11.

I/We request the grant of a patent on the basis of this application.

Signature



Date 22/11/04

12. Name and daytime telephone number of person to contact in the United Kingdom

Mr. G.H. Jones 020 8858 4039

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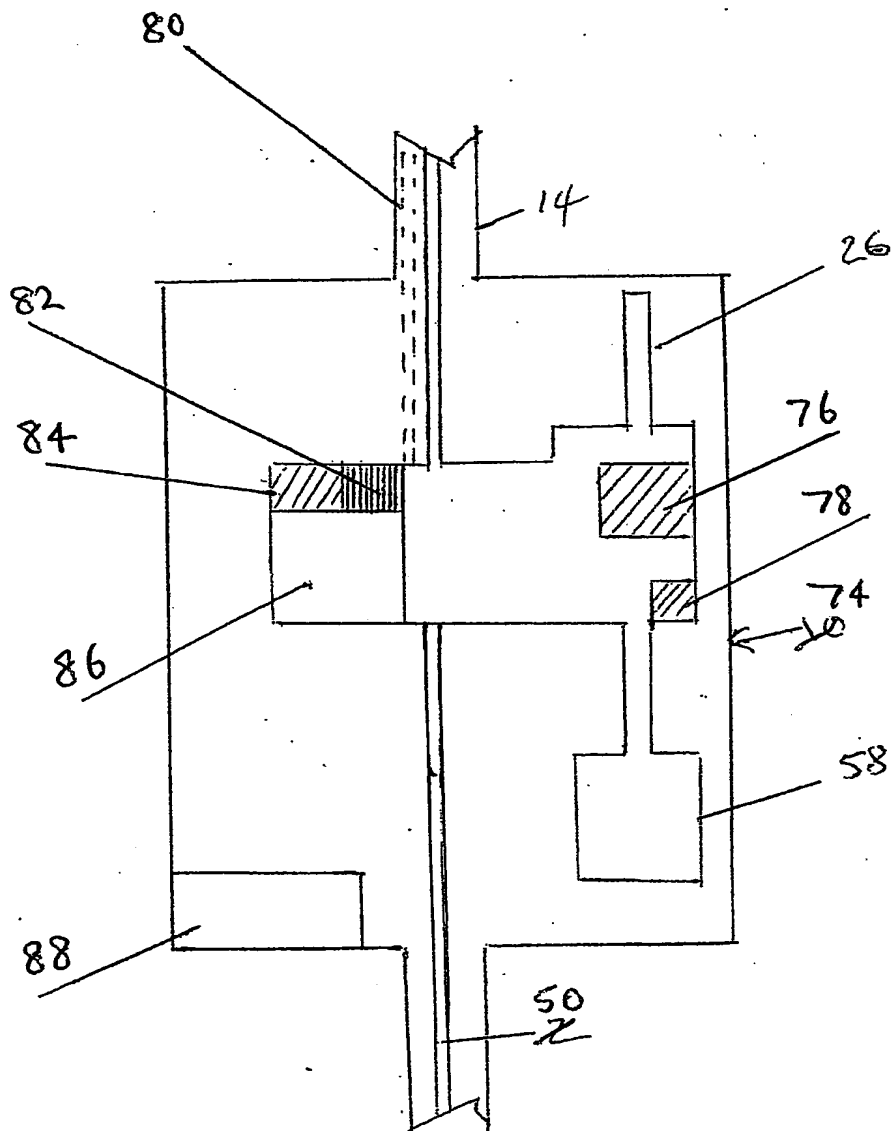


FIG 6

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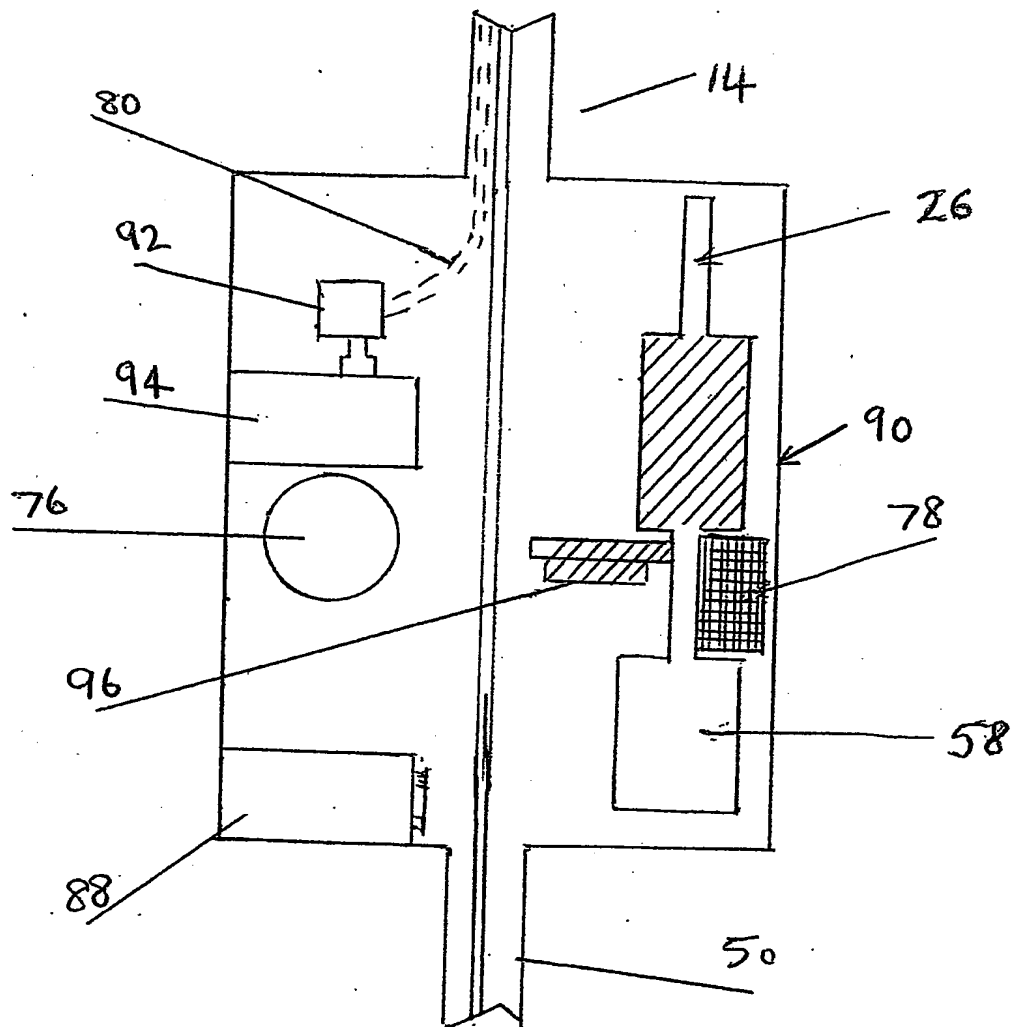


FIG 7

## A HEATING UNIT FOR HEATING A PATIO

This invention relates to a heating unit for heating a patio.

In my United Kingdom Patent Application No. 0401505.3 there is disclosed a heating unit for heating a patio, which heating unit comprises a heater portion which provides heat for the patio by burning gas from a gas container, and a meter, and the heating unit being such that the meter is a token-operated or a coin-operated meter which allows the passage of gas from the gas container to the heater portion on receipt of at least one token or coin, and the passage of the gas is only for a predetermined time period after which at least one further token or coin is required for allowing the passage of more gas for a further predetermined period.

Further embodiments of the invention will now be described solely by way of example and with reference to the accompanying drawings, which drawings have been numbered to follow on the drawings in the above mentioned patent application, and in which:

Figure 6 is a section through part of a second meter that may be used in the heating unit of the invention; and

Figure 7 is a section through a third meter that may be used in the heating unit of the present invention.

Referring to Figure 6, similar parts as in previous Figures have been given the same reference numerals for ease of comparison and understanding.

In Figure 6 it will be seen that there is shown a meter 74 which is an alternative to the meter 10. The meter 74 has the pipe 50 in the tubular conduit 14. The meter 74 also has the slot 26. Associated with the slot 26 are a timer 76, a micro switch 78, wires 80 to a thermocouple, a micro processor 82, an intelligent relay 84, a circuit board 86 and a battery 88.

The meter 74 operates such that a coin or token is put into the slot 26. The coin or token activates the micro switch 78 when the coin or token drops through the slot 26. The micro switch 78 activates the intelligent relay 84. The intelligent relay 84 in turn activates the timer 76 which is connected to the thermocouple with the aid of the circuit board 86 and the microprocessor 82. The battery 88 is a low voltage battery. The battery 88 provides electricity for the electronics contained within the housing of the meter 74. A low voltage current is obtained from the battery 88 following the insertion of a coin or a token into the slot 26. The low voltage current is thus able to control indirectly the operation of the thermocouple within the heating element. The operation of the thermocouple can now be such that its electrical current is controlled by the electronics within the housing of the meter 74. The thermocouple is able, for example via a thermomagnet, to release or close the valve controlling the gas flow on demand.

Figure 7 shows a meter 90. Similar parts as in the meter 74 have been given the same reference numerals for ease of comparison and understanding. It will be seen that the meter 90 has a tilt switch 92, a solenoid relay 94 and an internal coin counter 96.



The meter 90 operates such that a coin or token is placed through the slot 26. This causes the micro switch 78 to switch on a coin/token receiver. The solenoid relay 94 is triggered and this pushes the tilt switch 92 into an upright working position. After a predetermined time period provided by the timer 76, the tilt switch 92 can be rocked over automatically in order to break the electrical circuit created within the thermocouple which in turn operates a thermomagnet valve which opens and closes to control the gas flow to the heater element. The battery 88 may be used to power the electrical components within the meter 90. Alternatively, simple mechanical components may be employed. The internal coin/token counter is used to measure usage of the patio heater and terminates the usage after a predetermined number of coins or tokens have been deposited into the meter 78. This is a simple and effective way to operate the patio heater by means of a payment meter.

It is to be appreciated that the embodiments of the invention described above with reference to the accompanying drawings have been given by way of example only and that modifications may be effected.

# PATENT COOPERATION TREATY

PCT/GB05/000177

From the INTERNATIONAL BUREAU

## PCT

### NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

JONES, Graham, Henry  
Graham Jones & Company  
77 Beaconsfield Road  
Blackheath  
London SE3 7LG  
ROYAUME-UNI

Date of mailing (day/month/year) <b>10 March 2005 (10.03.2005)</b>	
Applicant's or agent's file reference <b>Jg-3076-PCT</b>	<b>IMPORTANT NOTIFICATION</b>
International application No. <b>PCT/GB05/000177</b>	International filing date (day/month/year) <b>20 January 2005 (20.01.2005)</b>
International publication date (day/month/year)	Priority date (day/month/year) <b>23 January 2004 (23.01.2004)</b>
Applicant <div style="text-align: right;">NICHOLSON, Mark, Andrew</div>	

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<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
23 January 2004 (23.01.2004)	0401505.3	GB	17 February 2005 (17.02.2005)
22 November 2004 (22.11.2004)	0425642.6	GB	17 February 2005 (17.02.2005)

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